

Community Resilience and Rural Ecotourism in Odisha: A PRISMA-Based Systematic Review

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Abstract

Although CBET has attracted considerable attention from policymakers and innovated through grass-root efforts, the relationship between community resilience and rural ecotourism in Odisha is still rather under-theorised. To bridge the gap, this study is guided by the PRISMA 2020 protocol (Page et al., 2021) to synthesize the empirical and theoretical literature on the role played by rural ecotourism in enhancing or weakening community resilience in Odisha, which is a highly vulnerable but culturally diverse and ecologically endowed state. The comprehensive search was conducted on Scopus, Web of Science, ScienceDirect, EBSCOhost, and Google Scholar from 2010 to 2025. From 1,472 papers extracted via database searching, 59 studies were selected for a qualitative synthesis after screening. Applying thematic analysis based on resilience theory (Folke et al., 2010) and sustainable livelihoods framework (Scoones, 2009), it was found that rural ecotourism affects four dimensions of resilience, namely economic diversification, social and institutional capacity, environmental stewardship, and adaptive capacity to shocks such as COVID-19 and climate variability. It is found from empirical literature in Western Odisha (Pujar & Nihar, 2024), Mayurbhanj (Mohanty, 2025), Chilika Lake (Samal & Dash, 2025) and numerous nature camp initiatives (Behera & Deb, 2024; Deb & Behera, 2025) that although ecotourism could enhance the capabilities of communities, power imbalances, poor benefit distribution, lack of institutional coordination and educational programs are constant constraints leading to diluted resilience outputs. In addition, the review highlights that there are policies like Swadesh Darshan 2.0 (Government of India, 2025) and Go Homestay portal at a state level (UNI India, 2026) that have created conducive environments; however, the process of conversion to tangible resilience is patchy and inconsistent. A theoretical model showing the association between tourism related resilience factors and the broader concept of community resilience and a number of propositions are

provided to serve as a direction for further research.

Keywords: Community resilience, rural ecotourism, Odisha, PRISMA systematic review, community-based tourism, sustainable livelihoods, adaptive capacity.

1. Introduction

The convergence of sustainable tourism development and community resilience has attracted significant attention among academics and practitioners (Hall et al., 2017; Lew, 2014). Rural ecotourism, which often emerges as a dual approach to address both conservation and alleviation of poverty (Stronza et al., 2019), plays an interesting role in this dynamic. Considering that areas characterized by high levels of socio-economic vulnerability, cultural marginality, and environmental fragility exist, the issue of how rural ecotourism can contribute to the development of resilient communities remains important (Bello et al., 2021; Ruiz Ballesteros, 2011).

For instance, Odisha, situated in the eastern coast region of India, serves as a perfect example. There are 62 different tribal groups within the state accounting for 22.8% of the total population, vast coverage of forests occupying about 33% of the state's land, and unique wetlands like Chilika Lake (Ramsar site) (Samal & Dash, 2025). Various governments have always encouraged the use of ecotourism as a means of fostering economic growth, conservation, and culture protection (Payini et al., 2024). For instance, the new Swadesh Darshan 2.0 plan by the Ministry of Tourism clearly outlines destinations that "promote livelihoods and community participation, especially that of tribal communities" (Government of India, 2025, para. 3). In Odisha, the government has established the Go Homestay portal, increased the tourism budget by 25%, and promised to develop 10 lakh "green livelihoods" from community forest initiatives (UNI India, 2026).

However, amidst such promising policy trends, empirical research has presented a rather complex scenario. A multi-method study of popular ecotourism sites in Western Odisha, involving 300 household interviews and spanning 25 villages, indicated "no substantial improvement in indigenous livelihoods, absence of education-based initiatives in ecotourism, and a clear mismatch between policy and practice" (Pujar & Nihar, 2024, p. 185). While community-based nature tourism (CMNT) initiatives were found to have favorable perceptions about community empowerment among villagers, these perceptions were vastly different from one another, depending on gender, age, and economic status (Behera & Deb, 2024).

Thus, while empirical evidence is diverse and multifaceted, a major knowledge gap emerges regarding the overall impacts of rural ecotourism initiatives on community resilience in Odisha. While numerous case studies and surveys exist, their implications remain scattered, making their cumulative significance to policy and practice unclear (Tiwari et al., 2025). To address this gap, the following review poses three research questions (RQs):

RQ1: In what ways can rural ecotourism foster or hinder community resilience in Odisha from the perspectives of economic, social, environmental and adaptive capacity components?

RQ2: What are some key facilitators and inhibitors that influence the resilience effects of ecotourism activities?

RQ3: What are the best suitable theoretical and methodological approaches to examine the relationship between resilience and tourism in resource-scarce rural settings?

This study will make three main contributions by addressing these research questions. Firstly, it will provide a systematic review of the relationship between community resilience and rural ecotourism in Odisha, acting as a benchmark for further research. Secondly, it will develop an integrative conceptual framework that connects the concepts of resilience associated with tourism to those related to community resilience. Lastly, it will offer practical recommendations based on the review results.

2. Theoretical Foundation

The current review is grounded in two theoretical paradigms that complement each other: resilience theory (Folke et al., 2010; Walker & Salt, 2012) and the sustainable livelihoods approach (SLA; Scoones, 2009). Combination of these theories makes it possible to develop a holistic framework for analysing the interaction between ecotourism and multiple aspects of community wellbeing.

2.1. Application of Resilience Theory in Rural Tourism Settings

Resilience- a system's ability to withstand disturbances, self-reorganize, and maintain its functioning (Holling, 1973) has gained popularity among tourism scholars (Espiner et al., 2017; Lew, 2014). In rural tourism settings, resilience involves not only surviving external pressures (economic crises, epidemics, extreme weather) but adapting to changes in the socio-economic environment. According to recent research, rural resilience can be viewed from three different angles: production resilience (economic sustainability and continuity of livelihoods); living resilience (social capital, health, and quality of life); and ecological resilience (the sustainable use of natural resources) (Li et al., 2023). The concept of community resilience is described as a result of a complex interplay of community resources, skills, and social structures (Bec et al., 2016).

The coronavirus pandemic was an ideal time to study the resilience of communities dependent on tourism globally (Gössling et al., 2021). Studies in Ghana revealed that some of the effective ways to enhance resilience within ecotourism communities included improving digital infrastructure, including the local community in tourism planning, and promoting the indigenous culture (Adu Ampong, 2020). It is important to note that the same studies have revealed that the benefits of such initiatives often do not trickle down “equally to all, benefiting only established businesses while excluding others” (Adu Ampong, 2020, p. 12). This observation can be directly applied to Odisha, considering the impact of the pandemic on tourism activities in the region (Behera & Deb, 2024).

2.2. Sustainable Livelihoods Approach

According to the SLA, the concept of livelihoods is defined as five types of capitals, which include human, social, natural, physical, and financial capitals (Scoones, 2009). All these capitals are formed in relation to vulnerability contexts (such as shocks, trends, and seasonal variations), which further affect the formulation of livelihood strategies and outcomes (DFID, 1999). In this regard, the SLA has been widely applied in studying the topic of community-based tourism in the context of coastal and marine environments due to “emerging complexities of vulnerability, livelihood assets, policies, institutions, livelihood strategies outcomes” (Masri et al., 2024, p. 1).

Given the high vulnerability of Odisha in the form of cyclones, floods, and droughts, the SLA

becomes highly appropriate for assessing the impact of ecotourism on the livelihood portfolio (Bahinipati & Venkatachalam, 2015).

2.3. Combination of Resilience and SLA Frameworks for Ecotourism Study

Based on the preceding theoretical framework, the following study incorporates an integrative approach from the “production living ecology” resilience assessment framework by Li et al. (2023) and the capital assets of SLA by Scoones (2009). The following table provides a description of the four main resilience aspects together with their corresponding indicators (Bec et al., 2016; Cinner & Barnes, 2019; Li et al., 2023).

Table 1. Resilience Dimensions and Analytical Indicators for Rural Ecotourism Analysis

Resilience Dimension	Key Indicators	Sources
Economic resilience	Income diversification, employment generation, benefit-sharing equity, entrepreneurial capacity	Pujar & Nihar (2024); Deb & Behera (2025)
Social/institutional resilience	Community participation, collective agency, governance structures, empowerment differentials	Behera & Deb (2024); Tiwari et al. (2025)
Environmental resilience	Conservation outcomes, resource use intensity, waste management, biodiversity protection	Samal & Dash (2025); Mohanty (2025)
Adaptive capacity	Crisis response (e.g., pandemic), climate adaptation, institutional learning, innovation adoption	Adu-Ampong (2020); Li et al. (2023)

3. Methodology

3.1. PRISMA Protocol

The current study adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines 2020 (Page et al., 2021). PRISMA is the prevailing protocol for conducting rigorous systematic reviews in tourism and development-related research (Agrawal et al., 2024; Kunjuraman & Hussin, 2020). PRISMA provides the basis for meticulous documentation, selection, inclusion criteria, and analysis.

3.2. Search Strategy and Databases

The systematic search was performed across five electronic databases: Scopus, Web of Science, ScienceDirect, EBSCOhost, and Google Scholar (Bramer et al., 2017). The search spanned academic papers from 1 January 2010 to 31 December 2025. The search algorithm was developed and fine-tuned during the pilot phase, as below:

("community resilience" OR "community-based ecotourism" OR "CBET" OR "sustainable livelihoods" OR "adaptive capacity") AND ("rural tourism" OR "ecotourism" OR "community managed nature tourism" OR "CMNT") AND ("Odisha" OR "Orissa" OR "India").

Wherever possible, Boolean operators and field-specific searches (title, abstract, keywords) were used. The first search produced 1,472 references. Reference lists of all included studies were manually scanned for other potentially relevant studies (snowballing technique; Wohlin,

2014).

3.3. Inclusion and Exclusion Criteria

The inclusion criteria for the review were based on the guidelines provided by Petticrew and Roberts (2006) and were as follows:

1. **Publication form:** Peer-reviewed journals, books, or systematic reviews.
2. **Language:** English.
3. **Geographical area:** Studies focused on Odisha as a primary case study or studies comparing other places but having significant implications for Odisha.
4. **Theme:** Studies that either directly or indirectly addressed the theme of rural ecotourism and community resilience (economic, social, environmental, and adaptive capacity).
5. **Research design:** Empirical (qualitative or quantitative) or theoretical/conceptual contributions.
6. **Temporal framework:** The studies published from 2010 to 2025, capturing both pre- and post-pandemic dynamics (Gössling et al., 2021).

Exclusion criteria included the following: (a) studies exclusively examining urban tourism or mass tourism; (b) studies not addressing any aspect of resilience; (c) editorials, commentaries, and abstracts from conferences not offering any substantive theoretical or empirical insights; and (d) in accessible full-text papers.

3.4. Screening and Selection Process

The screening process was completed in three steps using Rayyan QCRI (Ouzzani et al., 2016). The first step involved eliminating duplicates ($n = 218$). In the second step, the titles and abstracts were screened by two independent reviewers (inter-rater reliability $\kappa = 0.86$). Any differences were settled either by discussion or by referring to a third reviewer (Page et al., 2021). In the final step, full texts were obtained and evaluated for eligibility. Fifty-nine studies met all the inclusion criteria and thus were included in the qualitative synthesis.

The PRISMA flow diagram is illustrated in Figure 1. (Page et al., 2021).

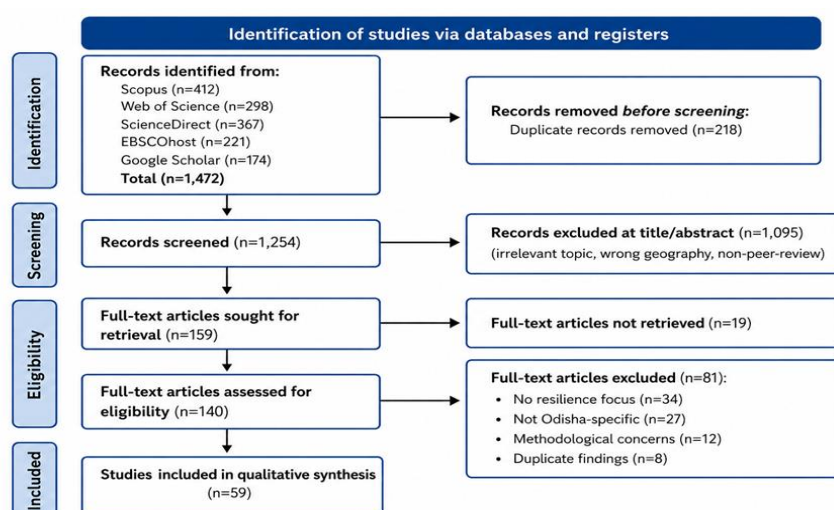


Figure 1. PRISMA 2020 flow diagram of study selection (adapted from Page et al., 2021).

3.5. Data Extraction and Quality Assessment

A structured data extraction form was prepared that included: (a) bibliographic details; (b) study methodology and design; (c) type of ecotourism (CBET, CMNT, homestay, nature camps); (d) resilience dimensions explored; (e) major results; (f) identified obstacles and facilitators; (g) policy implications (Moher et al., 2015). Quality assessment was carried out by the Mixed Methods Appraisal Tool (MMAT) 2018 (Hong et al., 2018). While no paper was excluded based on quality, quality assessments were considered in evaluating the validity of major findings (Petticrew & Roberts, 2006).

3.6. Data Synthesis Method

The heterogeneity of methodologies, outcome measures, and geographical locations led to the use of thematic (narrative) synthesis (Popay et al., 2006). Thematic synthesis was performed in three stages: (a) preliminary synthesis (grouping articles according to resilience dimensions and geographical location); (b) examination of relationships (identifying convergent, divergent, and contradicting patterns among studies); (c) assessment of reliability (quality of studies and consistency of results). Effect size range is presented where there is enough quantitative information available, but no meta-analysis could be done due to the differences in outcomes (Higgins & Green, 2011).

4. Results

The results are presented based on the four dimensions of resilience defined in the theoretical framework: economic, social and institutional, environmental, and adaptive capacity. For each of these dimensions, the review highlights evidence that comes from Odisha-specific studies, while distinguishing the findings from those based on other relevant cases.

4.1. Economic Resilience: Diversity, Employment, and Benefits Sharing

Of all the dimensions evaluated, the area that received the highest attention was economic resilience, which was considered in 42 out of the total 59 studies analyzed (71%). There is a clear dichotomy between the fact that ecotourism does indeed create additional income and employment opportunities for some households, and the extent to which community-wide economic resilience may be affected by the process (Pujar & Nihar, 2024; Sahu et al., 2025).

Odisha-specific evidence: The highest-quality study conducted in Odisha—an innovative mixed-method analysis of 300 households in 25 villages in Western Odisha—concludes that the introduction of ecotourism to “native livelihood systems did not bring any significant improvement” (Pujar & Nihar, 2024, p. 192). This same study identifies “the lack of educational elements in the ecotourism model,” as well as the “general inconsistency between the policy and its implementation” (Pujar & Nihar, 2024, p. 194). This pessimistic conclusion is confirmed by a qualitative study conducted in the Mayurbhanj district, where Indigenous Santhal, Ho, and Munda peoples created their own innovative model called the “Nature, Culture, and Commons,” which “is based on their sacred groves (Jaheras)” and aims “to conserve their biocultural sanctuaries from deforestation, infrastructure expansion, and cultural destruction” (Mohanty, 2025, p. 3). This model shows that when implemented correctly (as community-led, economically embedded, and culture-based), ecotourism can “promote biodiversity, preserve identity, and create community capital” (Mohanty, 2025, p. 9). However, such instances are more an exception than the norm.

In a survey conducted among 184 local people from eight nature camps in Odisha, favorable perceptions regarding the role played by CMNT in empowering communities were recorded; however, the results indicated that empowerment was significantly different "across gender, age, and income, but not across education and occupation" (Behera & Deb, 2024, p. 15). In another research conducted among service providers within the same eight nature camps (N = 141), the role played by CMNT in enhancing individual well-being was identified based on social exchange theory (Deb & Behera, 2025, p. 8).

Comparative evidence: These conflicting results are in line with existing literature. One PRISMA-based systematic review on community involvement in sustainable ecotourism (analyzing 71 peer-reviewed papers mostly from Southeast and South Asian regions) highlighted that "community participation is crucial to sustainable ecotourism as it leads to conservation success, economic benefits, and social solidarity"; however, "several barriers hinder active participation, such as power asymmetry, economic inequality, and lack of equitable distribution systems" (Tiwari et al., 2025, p. 1). More generally, in the developing world, systematic research on sustainable green business models in rural tourism indicated that achieving "economic development along with environmental preservation and authentic rural identity" continues to be an important issue (Siregar et al., 2024, p. 73).

4.2. Social and Institutional Resilience: Participation, Governance, and Empowerment

A total of 38 papers (64%) analyzed the social or institutional aspect of resilience, with community participation cited as the most crucial mediating factor (Tiwari et al., 2025; Kunjuraman & Hussin, 2020). It is clear from the research that the ability of ecotourism to contribute to social resilience will largely depend on how involved the community is in decision-making and governance processes (Bello et al., 2021; Stone & Nyaupane, 2018).

Evidence specific to Odisha: Behera and Deb (2024) have conducted an empirical analysis of CMNT in Odisha, which presents quantitative evidence on the positive association between community managed tourism and community empowerment. More importantly, the study examines the extent to which the resident perceptions about CMNT vary depending on their demographic backgrounds. Women, younger generations, and poor families have been found to feel less empowered by CMNT due to inequalities within the communities, which may lead to their reduced social resilience (Behera & Deb, 2024, p. 18). Behera and Deb (2024) conclude that CMNT projects should be carefully considered in terms of ensuring social resilience since CMNT is vital for community empowerment while resilience focuses on the collectives (Bec et al., 2016; Ruiz Ballesteros, 2011).

In contrast, "Nature, Culture, and Commons" initiative from Mayurbhanj represents another governance model of "participatory mapping, youth eco guiding, women-led homestays and kitchens, and storytelling based on ritual and craft" integrated into Indigenous governance mechanisms (Mohanty, 2025, p. 8). Social resilience in this case is achieved not only through economic activities of local people but also through reproduction of their culture.

Policy background: At the macro level, the Swadesh Darshan 2.0 initiative by the Government of India clearly states the objective of creating "sustainable and responsible tourism destinations" while ensuring "promotion of local livelihood and community involvement,

including tribals” (Government of India, 2025, para. 4). The Go Homestay project of Odisha, which was initiated in 2026, seeks to “provide transparency, accessibility and ease of doing business for prospective homestay operators along with livelihood creation at the grassroots level” (UNI India, 2026, para. 2). While these policy initiatives provide an enabling institutional framework, the mismatch between policy intent and on-ground delivery observed in many empirical studies continues to be a major problem (Pujar & Nihar, 2024; Payini et al., 2024).

4.3. Environmental Resilience: Conservation Synergies and Trade Offs

Environmental resilience, defined as the ability of regions to preserve their ecological integrity and natural resources bases while earning economically from nature-based tourism activities, was studied through 31 papers (53%). Case studies conducted in ecologically fragile areas of Odisha (Chilika Lake, Similipal Tiger Reserve, Bhitarkanika) showed the possibilities and constraints associated with the use of ecotourism as a means of conservation (Samal & Dash, 2025; Sahu et al., 2025).

Chilika Lake: SWOT QSPM (strengths, weaknesses, opportunities, threats quantitative strategic planning matrix) analysis of ecotourism in the Chilika wetlands successfully charted the course for the sustainable development of ecotourism, which identified strategic priorities that would ensure harmony between conservation and tourism (Samal & Dash, 2025, p. 4). Moreover, Chilika has turned into a model example of community-based conservation efforts; for instance, the annual National Chilika Bird Festival highlights the fact that “local residents actively engage as bird guides, boat drivers, craftsmen, and cultural representatives, thereby showing how conservation, income generation, and tourism may go hand in hand” (Samal & Dash, 2025, p. 9).

Lessons from nearby states: Comparative lessons from the Mangata Wildlife Park in Chhattisgarh suggest that CBET can significantly improve the “economic and socioeconomic sustainability of the locals” if proper planning, investment, and participatory governance accompany its implementation (Sahu et al., 2025, p. 418). Nevertheless, the same study warns that CBET’s success hinges heavily on “institutional, policy, and equitable benefit allocation” (Sahu et al., 2025, p. 420).

The results of a similar study from Katarniaghat Wildlife Sanctuary, in Uttar Pradesh, show that even though there is untapped potential for CBET, tapping into these potential needs systematic consideration of issues, challenges, and opportunities associated with participation in the process (Chaturvedi et al., 2025, p. 275).

4.4. Adaptive Capacity: Response to Disruptions and Crises

Adaptive capacity was the subject of nineteen (32%) of the reviewed works, and the majority of these articles came out after 2022 due to the impact of the COVID 19 outbreak on resilience research (Gössling et al., 2021; Zenker & Kock, 2020). The findings suggest that ecotourism communities characterized by livelihood diversification, robust social networks, and inclusive governance structure responded better to disruptions caused by the pandemic (Adu Ampong, 2020; Sharma et al., 2021).

Resilience strategies after the pandemic: Resilience strategy used by ecotourism communities in Ghana’s Kassena Nankana West district included “building digital infrastructure, enhancing quality health service provision, engaging local community members

in the tourism plan development and cultural heritage enhancement” (Adu Ampong, 2020, p. 11). As a result, the above resilience strategies contributed to “spectacular growth in the monthly revenue of stakeholders”, although there were some problems with the benefits’ uneven distribution.

Applicability to Odisha: Although there is no particular study on the resilience of rural ecotourism against the impacts of the pandemic in Odisha, the significance of the findings presented above is evident due to the state's vulnerability to other crises (Bahinipati & Venkatachalam, 2015). The state is frequently hit by cyclones, floods, and even (in some districts) drought, indicating that communities practicing ecotourism also need to be resilient to climate shocks (Cinner & Barnes, 2019). One study has already suggested a framework for assessing the resilience of tourism villages with a focus on production, living, and ecological resilience (Li et al., 2023, p. 2).

4.5. Synthesis Across Dimensions: Integration of Findings into Conceptual Framework

For all the resilience dimensions reviewed in this paper, one point is consistently observed – the outcomes achieved by rural ecotourism in Odisha through building resilience are strongly determined by context (Bello et al., 2021; Ruiz Ballesteros, 2011). An integrated conceptual framework, which captures the findings presented above, can be found in Figure 2 below (adapted from Bec et al., 2016; Li et al., 2023; Tiwari et al., 2025).

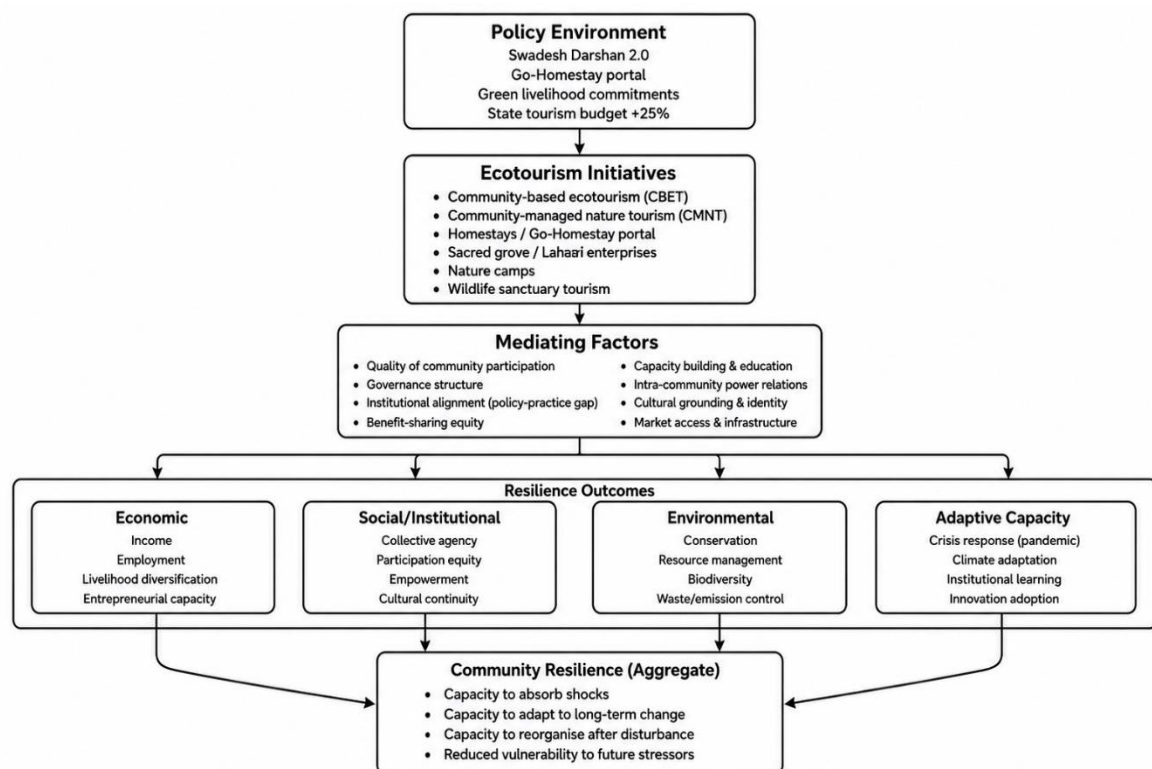


Figure 2. Conceptual framework: Pathways from ecotourism initiatives to community resilience in Odisha (adapted from Bec et al., 2016; Li et al., 2023; Tiwari et al., 2025).

5. Discussion

5.1. Main Findings from the Analysis

This systematic review presents for the first time a complete overview of the current literature on the topic of community resilience in relation to rural ecotourism in Odisha. Three findings stand out as particularly important.

First, even though ecotourism brings financial benefits and empowers the views of many community members, its impact on overall community resilience is limited by ongoing inequalities in the distribution of the benefits received and in active engagement (Behera & Deb, 2024; Pujar & Nihar, 2024). The problem of the lack of conformity between policies and practice in Western Odisha, highlighted in the research titled “mismatch between policy and practice” by Pujar and Nihar (2024), is only symptomatic of ecotourism initiatives’ tendency to see communities as beneficiaries rather than co-managers.

Secondly, examples of ecotourism that have been shown to increase community resilience are those such as Jahera’s “Nature, Culture and Commons” approach in Mayurbhanj district (Mohanty, 2025), which all share some commonalities – deep roots within indigenous governance structures, multi-generational involvement, rootedness within cultural practice, and the combination of ecological management alongside livelihoods creation (Berkes, 2012). These are not isolated case studies but rather design principles from which to draw a resilient ecotourism framework.

Thirdly, there is a body of theory that combines resilience theory (Folke et al., 2010) and the sustainable livelihoods approach (Scoones, 2009) that offers a solid analytical toolset for analyzing the impact of ecotourism on multiple capitals (natural, human, social, financial, physical) within vulnerable situations (Masri et al., 2024). One example of an approach to this is the “production living ecology,” which has been piloted in China (Li et al., 2023) with considerable transferability potential to Odisha, given its similarities in terms of context.

5.2. Theoretical Implications

The results have implications for tourism resilience theory in three respects. First, the study shows that community resilience is not a one-dimensional concept whereby ecotourism either strengthens or weakens resilience. It is a complex process working along various dimensions (economic, social, and environmental) and among various sub-groups within communities (Behera & Deb, 2024; Ruiz Ballesteros, 2011). Secondly, the systematic review reaffirms the significance of collective actions—resilience is not only an aggregate of individual household resilience, but it is achieved through collective capabilities beyond the capability of individual households to deliver (Bec et al., 2016; Cinner & Barnes, 2019). Thirdly, the case of Odisha helps to expand the theoretical framework of tourism community resilience (community assets, community capability, and social structure; Bec et al., 2016) to a resource-constrained context where small amounts of resources can yield resilience gains when community capabilities (capacity, indigenous knowledge, and social networks) are strong (Berkes, 2012; Folke et al., 2010).

5.3. Practical and Policy Implications

To Policymakers: The present efforts of the Government of Odisha - Go Homestay website, a 10-lakh target for green livelihood, and 15 prioritized eco-tourism sites (UNI India, 2026)

reflect strong institutional commitment. For the full realization of their resilience-building capabilities, there are three changes that should be made: (a) introduce a quota system that mandates the involvement of communities in all ecotourism ventures funded through Swadesh Darshan 2.0 (Government of India, 2025); (b) adopt benefit-sharing agreements that provide clear percentage allocation to community development funds and can be independently monitored (Stone & Nyaupane, 2018); (c) include education programs in all ecotourism plans, considering that in Western Odisha, “lack of educational components in ecotourism” has been flagged as a crucial deficiency (Pujar & Nihar, 2024, p. 194).

For tourism planners and professionals: Since the success of the Jahera-based model (Mohanty, 2025) demonstrates that ecotourism can be designed on the basis of the existing Indigenous governance systems, it may be more beneficial to focus on training schemes for nature camps' service providers who would consider issues of gender equality and intergenerational equity, which have been identified by CMNT research as important factors affecting empowerment perceptions (Behera & Deb, 2024; Deb & Behera, 2025).

For community-based organizations: Resilience audits based on dimensions specified in Table 1 and the proposed framework in Figure 2 could assist communities in evaluating whether their ecotourism activities contribute to the development of their resilience or serve as an extra source of income that is prone to failure (Bec et al., 2016). It is crucial to develop participatory mechanisms for monitoring and evaluation focused on resilience indicators.

6. Conclusion

Rural ecotourism in Odisha remains a paradox of hope and frustration. Hope is illustrated by community-driven projects that conserve sacred groves, elevate indigenous women and young people, and provide employment opportunities while preserving cultural integrity (Mohanty, 2025). Frustration is evident in numerous projects where government policy language regarding community involvement clashes with real-world issues of power dynamics, inequitable resource distribution, and lack of education investment (Pujar & Nihar, 2024; Tiwari et al., 2025). As this systematic review has established, community resilience is not an inevitable consequence of ecotourism activities, but a desired end result that requires intentional planning and protection (Bec et al., 2016; Ruiz Ballesteros, 2011). With Odisha continuously developing its tourism offerings, including Chilika Lake, Similipal, Bhitarkanika, and its fifteen preferred locations, the state can capitalize on this potential to incorporate resilience into its tourism policies. Such an approach will not only enhance its commitment to sustainability, but also make Odisha a global leader in the field of resilient-based community-driven rural ecotourism in the Global South.

7. Limitations of This Review and Potential for Future Studies

A number of issues associated with this literature review need to be addressed. First, despite thorough searches, there is no way to exclude the possibility of publication bias where more studies may be published that find positive benefits from ecotourism compared to those that do not or show no difference at all (Petticrew & Roberts, 2006). Second, excluding non-English articles could have resulted in missing some information related to the Indian languages. Third, the diversity of measures used in different articles makes it impossible to perform a meta-analysis.

Future research needs to focus on: (a) longitudinal panel research on indicators of community resilience (economic, social, environmental) along with development of ecotourism (Cinner & Barnes, 2019); (b) comparative case studies of highly resilient communities (such as Jahera model) and poorly resilient communities to determine causal mechanisms; (c) adaptation and application of the framework of assessment of community resilience in production living ecology (Li et al., 2023) in different regions of Odisha; (d) mixed methods research on adaptive capacity after the pandemic, specifically how ecotourism communities in Odisha coped with the pandemic due to COVID 19 and what can be learned from that experience to deal with climate shocks (Adu Ampong, 2020; Sharma et al., 2021).

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